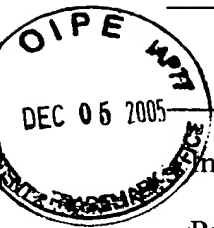


09/858,252

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Sokolov et al.

Attorney Docket No.: SUN1P829/P6115

Patent: 6,934,946 B2

Issued: August 23, 2005

Title: LIGHTWEIGHT NATIVE METHOD
INVOCATION INTERFACE FOR JAVA
COMPUTING ENVIRONMENTS

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first-class mail on December 2, 2005 in an envelope addressed to the Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

Signed: _____

Aurelia M. Sanchez

**REQUEST FOR CERTIFICATE OF CORRECTION
OF OFFICE MISTAKE
(35 U.S.C. §254, 37 CFR §1.322)**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Attn: Certificate of Correction

Dear Sir:

Attached is Form PTO-1050 (Certificate of Correction) at least one copy of which is suitable for printing. The errors together with the exact page and line number where the errors are shown correctly in the application file are as follows:

SPECIFICATION:

1. Column 1, line 67, change "Interface UNI)" to --Interface (JNI)--. This appears correctly in the patent application as filed on May 15, 2001, on page 2, line 21.
2. Column 2, line 16, change "Interface UNI)" to --Interface (JNI)--. This appears correctly in the patent application as filed on May 15, 2001, on page 3, line 1.

**Certificate
DEC 07 2005
of Correction**

DEC 07 2005

Patentee hereby requests expedited issuance of the Certificate of Correction because the error lies with the Office and because the error is clearly disclosed in the records of the Office. As required for expedited issuance, enclosed is documentation that unequivocally supports the patentee's assertion without needing reference to the patent file wrapper.

It is noted that the above-identified errors were printing errors that apparently occurred during the printing process. Accordingly, it is believed that no fees are due in connection with the filing of this Request for Certificate of Correction. However, if it is determined that any fees are due, the Commissioner is hereby authorized to charge such fees to Deposit Account 500388 (Order No. SUN1P829).

Respectfully submitted,
BEYER WEAVER & THOMAS, LLP



R. Mahboubian
Registration No. 44,890

P.O. Box 70250
Oakland, CA 94612-0250
650-961-8300

DEC 07 2005

ancillary information that is associated with the class. The class file format (as well as the general operation of the Java virtual machine) is described in some detail in The Java Virtual Machine Specification, Second Edition, by Tim Lindholm and Frank Yellin, which is hereby incorporated herein by reference.

5 A virtual machine operating in a Java computing environment allows for execution of native methods (functions or procedures) written in platform specific programming languages (native languages). In other words, the Java programming language allows invocation of native methods written in other programming languages (e.g., C, C + +, etc.). This means that the processing
10 of the native method is performed by a section of code written in the native programming language. Accordingly, there is a need to convert the parameters (e.g., Java primitive data types, Java reference objects) from Java programming language to parameters suitable for the native language.

 To achieve this, recently, Java Native Interface (JNI) has been
15 developed as an interface between the Java program and the native methods written in programming languages other than Java (e.g., C, C + +, etc.). Using Java Native Interface (JNI), native methods are provided a reference (environment parameter). More particularly, every invocation of a native method passes a reference to a table of functions that are used to facilitate the
20 conversion of parameters from Java to the native language. Thus, the Java Native Interface (JNI) does not give direct access to Java parameters (e.g., Java primitive data types, Java reference objects). Instead, these parameters are accessed and indirectly through various Java Native Interface (JNI) methods which perform the conversation. More details about the Java Native Interface
25 (JNI) are provided in Core Java 2, Volume II-Advanced Features, by Cay S. Horstmann and Gary Cornell, which is incorporated by reference herein for all purposes.

 Although the Java Native Interface (JNI) provides a useful tool for invocation of native programs in Java computing environments, there is a
30 significant cost associated with using the Java Native Interface (JNI). In other words, there is a significant amount of memory and runtime overhead associated with the use of the methods of the Java Native Interface (JNI). As a

result, using the Java Native Interface (JNI) can have adverse effects on the performance of virtual machines, especially those operating with relatively less memory and/or computing power (e.g., embedded systems).

In view of the foregoing, there is a need for alternative techniques for
5 invocation of native methods in Java computing environments.

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(Also Form PT-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 6,934,946 B2

DATED : August 23, 2005

INVENTOR(S) : Sokolov et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the Specification:

Column 1, line 67, change "Interface UNI)" to --Interface (JNI).--

Column 2, line 16, change "Interface UNI)" to --Interface (JNI).--

MAILING ADDRESS OF SENDER:

PATENT NO. 6,934,946 B2

R. Mahboubian
BEYER WEAVER & THOMAS, LLP
P.O. Box 70250
Oakland, CA 94612-0250

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